

WEST Search History

DATE: Friday, November 12, 2004

<u>Hide?</u>	<u>Set Name</u>	<u>Query</u>	<u>Hit Count</u>
		<i>DB=USPT,EPAB,JPAB,DWPI,TDBD; PLUR=YES; OP=OR</i>	
<input type="checkbox"/>	L2	(prolamine or zein) adj5 (coat\$) adj5 percent\$	1
<input type="checkbox"/>	L1	(prolamine or zein) adj5 coat\$	174

END OF SEARCH HISTORY

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DATE: Friday, November 12, 2004

Hide? Set Name Query**Hit Count***DB=USPT,EPAB,JPAB,DWPI,TDBD; PLUR=YES; OP=OR*

<input type="checkbox"/>	L3	(zein or prolamine) same (control\$ or sustain\$) same (starch or gelatin)	81
<input type="checkbox"/>	L2	(zein or prolamine) same (control\$ or sustain\$) same (hydrocolloid)	5
<input type="checkbox"/>	L1	(zein or prolamine) same (control\$ or sustain\$)	455

END OF SEARCH HISTORY

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L2: Entry 1 of 5

File: USPT

Jul 21, 1987

DOCUMENT-IDENTIFIER: US 4681756 A

TITLE: Prevention of N-nitroso compound formation in vivo

Brief Summary Text (26):

Hydrocolloids suitable for use in these controlled release formulations include one or more natural, partially or totally synthetic anionic or, preferably, nonionic hydrophilic gums, modified cellulosic substances or proteinaceous substances such as, for example, acacia, gum tragacanth, locust bean gum, guar gum, karaya gum, agar, pectin, carrageen, soluble and insoluble alginates, methylcellulose, hydroxypropyl methylcellulose hydroxypropylcellulose, sodium carboxymethylcellulose, carboxypolymethylene (Carbopol-Cabot Corporation), gelatin, casein, zein, bentonite, Veegum (R. T. Vanderbilt Co.) and the like. A preferred hydrocolloid is hydroxypropyl methylcellulose. The use of such materials in pharmaceutical compounding is also known in the art. For example, Kaplan et al. U.S. Pat. No. 3,555,151 discloses the use of such hydrocolloids in controlled release antacid preparations.

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L3: Entry 52 of 81

File: USPT

Nov 3, 1992

DOCUMENT-IDENTIFIER: US 5160742 A

**** See image for Certificate of Correction ****

TITLE: System for delivering an active substance for sustained release

Brief Summary Text (17):

Japanese Kokoku Hei 3-988 teaches that a health food which is either inside of a gelatin capsule or coated with gelatin may advantageously be overcoated with a "high quality zein" to prevent the health food from being released until reaching the pylorus of the stomach. However, there is no teaching or indication that sustained release of the health food in the intestine is achievable with this method, or even is desirable. The main objective is to prevent the health food from being exposed in the mouth.

Brief Summary Text (24):

U.S. Pat. No. 3,939,259 teaches a sustained release system of gelatin capsules containing: (a) uncoated particles of an active substance to be released in the stomach during the first hour after ingestion; (b) particles of the active substance coated with a mixture of zein and shellac to be released two hours after ingestion; and particles of the active substance with a thicker coating of the zein and shellac mixture which is to be released four hours after ingestion. This sustained release system is not designed to minimize release of the active ingredient in the stomach.

Brief Summary Text (26):

U.S. Pat. No. 4,308,251 teaches a twice-a-day sustained release aspirin tablet having both a time release controlling agent, (preferably cellulose acetate phthalate, but could be zein), and an erosion promoting agent such as corn starch. However, there is no teaching or suggestion that an enteric coating should be used to minimize release of the aspirin in the stomach.

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L3: Entry 52 of 81

File: USPT

Nov 3, 1992

US-PAT-NO: 5160742

DOCUMENT-IDENTIFIER: US 5160742 A

**** See image for Certificate of Correction ****

TITLE: System for delivering an active substance for sustained release

DATE-ISSUED: November 3, 1992

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Mazer; Terrence B.	Reynoldsburg	OH		
Meyer; Glenn A.	Wankegan	IL		
Hwang; Shie-Ming	Arlington	OH		
Candler, Jr.; Edrick L.	Dublin	OH		
Drayer; Lonnie R.	Gahanna	OH		
Daab-Krzykowski; Andre	Columbus	OH		

US-CL-CURRENT: 424/469; 424/470, 424/491, 424/497

CLAIMS:

What is claimed is:

1. A system for delivery of an active substance for sustained release in the intestinal tract, comprising a particle having a core containing an active substance, said core being encapsulated by at least two layers of coating materials, one of said layers of a coating material consisting essentially of a prolamine and at least one material selected from the group consisting of plasticizers and hydrophobic substances and the other layer a coating material consisting essentially of an enteric compound and at least one material selected from the group consisting of plasticizers and anti-tackiness agents, such that said other layer is generally resistant to disintegration in human gastric juices but will disintegrate in human intestinal fluids.

2. A system for delivery of an active substance for sustained release in the intestinal tract according to claim 1 wherein the core is encapsulated by a first layer of a coating material, consisting essentially of a prolamine and at least one material selected from the group consisting of plasticizers and hydrophobic substances said first layer is encapsulated by an exterior layer of a coating material consisting essentially of an enteric compound and at least one material selected from the group consisting of plasticizers and anti-tackiness agents, such that said exterior layer is generally resistant to disintegration in human gastric juices but will disintegrate in human intestinal fluids.

3. A system for delivery of an active substance for sustained release in the intestinal tract according to claim 1 wherein the core is encapsulated by a

first layer of a coating material consisting essentially of an enteric compound and at least one material selected from the group consisting of plasticizers and anti-tackiness agents, such that said first layer is generally resistant to disintegration in human gastric juices but will disintegrate in human intestinal fluids, and said first layer is encapsulated by an exterior layer of a coating material consisting essentially of a prolamine and at least one material selected from the group consisting of plasticizers and hydrophobic substances.

4. A system for delivery of an active substance for sustained release in the intestinal tract according to claim 1 wherein the core is encapsulated by a first layer comprising a coating material consisting essentially of a prolamine and at least one material selected from the group consisting of plasticizers and hydrophobic substances, said first layer is encapsulated by a second layer comprising a coating material consisting essentially of an enteric compound and at least one material selected from the group consisting of plasticizers and anti-tackiness agents, such that said second layer is generally resistant to disintegration in human gastric juices but will disintegrate in human intestinal fluids, and said second layer is encapsulated by an exterior layer comprising a coating material consisting essentially of a prolamine and at least one material selected from the group consisting of plasticizers and hydrophobic substances.

5. A system for delivery of an active substance for sustained release in the intestinal tract according to any one of claims 1 through 4 wherein the prolamine is zein.

6. A system for delivery of an active substance for sustained release in the intestinal tract according to any one of claims 1 through 4 wherein the enteric compound comprises at least one material selected from the group consisting of acids and esters of methacrylic copolymers.

7. A system for delivery of an active substance for sustained release in the intestinal tract according to claim 5 wherein the enteric compound comprises at least one material selected from the group consisting of acids and esters of methacrylic copolymers.

8. A system for delivery of an active substance for sustained release in the intestinal tract according to any one of claims 1 through 4 comprising a plurality of said particles where in the particles have a size of not greater than about 700 microns, and the system further comprises a liquid medium, said particles being disposed within said liquid medium.

9. A system for delivery of an active substance for release in the intestinal tract according to claim 8 wherein the liquid medium is an aqueous medium.

10. A system for delivery of an active substance for release in the intestinal tract according to claim 9 wherein the prolamine is zein and the enteric compound comprises at least one material selected from the group consisting of acids and esters of methacrylic copolymers.

11. A system for delivery of an active substance for release in the intestinal tract according to claim 10 wherein the active substance is a .beta.-lactam antibiotic.

12. A system for delivery of an active substance for release in the intestinal tract according to claims 1 through 4 wherein the active substance is selected from the group consisting of analgesics, antibiotics, antidepressants,

antivirals, antibodies, immuno-modulators, oncolytics, immunogens, hormones, vaccines, enzymes, nutrients and dietary fiber.

13. A system for delivery of an active substance for release in the intestinal tract comprising a particle having a core containing an active substance, said core being encapsulated by a first layer of a coating material consisting essentially of an enteric compound in an amount of about 10% to 70% of the total weight of the core and at least one material selected from the group consisting of plasticizers and anti-tackiness agents, such that said first coating layer is generally resistant to disintegration in human gastric juices but will disintegrate in human intestinal fluids, and said first coating layer being encapsulated by an exterior layer of a coating material consisting essentially zein in the amount of about 20% to 100% by weight of the sum of the weights of the core and the first coating layer and at least one material selected from the group consisting of plasticizers and hydrophobic substances.

14. A system for delivery of an active substance for release in the intestinal tract according to claim 13 wherein the enteric compound comprises at least one material selected from the group consisting of acids and esters of methacrylic copolymers.

15. A system for delivery of an active substance for release in the intestinal tract according to claim 14 wherein the zein has an ash content of not greater than about 2% by weight.

16. A system for delivery of an active substance for release in the intestinal tract according to any one of claims 13 through 15 wherein the active substance is selected from the group consisting of analgesics, antibiotics, antidepressants, antivirals, antibodies, immuno-modulators, oncolytics, immunogens, hormones, vaccines, enzymes, nutrients and dietary fiber.

17. A system for delivery of an active substance for release in the intestinal tract according to any one of claims 13 through 15 wherein the active substance is a .beta.-lactam antibiotic.

18. A system for delivery of an active substance for release in the intestinal tract comprising a particle having a core containing an active substance, said core being encapsulated by a first layer of a coating material consisting essentially of zein in the amount of about 10% to 70% of the total weight of the core and at least one material selected from the group consisting of plasticizers and hydrophobic substances, and said first coating layer being encapsulated by a second coating layer consisting essentially of an enteric compound in an amount of about 10% to 70% of the sum of the weights of the core and the first coating layer and at least one material selected from the group consisting of plasticizers and anti-tackiness agents, such that said second coating layer is generally resistant to disintegration in human gastric juices but will disintegrate in human intestinal fluids.

19. A system for delivery of an active substance for release in the intestinal tract according to claim 18 wherein the particle is in the form of a tablet.

20. A system for delivery of an active substance for release in the intestinal tract according to either of claims 18 or 19 wherein the active substance is selected from the group consisting of analgesics, antibiotics, antidepressants, antivirals, antibodies, immuno-modulators, oncolytics, immunogens, hormones, vaccines, enzymes, nutrients and dietary fiber.

21. A system for delivery of an active substance for release in the intestinal

tract according to either of claims 18 or 19 wherein the active substance is a .beta.-lactam antibiotic.

22. A system for delivery of an active substance for release in the intestinal tract comprising a particle having a core containing an active substance, said core being encapsulated by a first layer of a coating material consisting essentially of zein in an amount of about 10% to 70% of the total weight of the core and at least one material selected from the group consisting of plasticizers and hydrophobic substances, said first coating layer being encapsulated by a second coating layer consisting essentially of an enteric compound in the amount of about 5% to 70% of the sum of the weights of the core and first coating layer and at least one material selected from the group consisting of plasticizers and anti-tackiness agents, such that said layer is generally resistant to disintegration in human gastric juices but will disintegrate in human intestinal fluids, and said second coating layer being encapsulated by an exterior coating layer of a coating material consisting essentially of zein in an amount of about 20% to 70% of the sum of the weights of the core and the first two coating layers and at least one material selected from the group consisting of plasticizers and hydrophobic substances.

23. A system for delivery of an active substance for release in the intestinal tract according to claim 22 wherein the zein has an ash content of not greater than about 2% by weight.

24. A system for delivery of an active substance for release in the intestinal tract according to claim 22 wherein the enteric compound comprises at least one material selected from the group consisting of acids and esters of methacrylic copolymers.

25. A system for delivery of an active substance for release in the intestinal tract according to claim 23 wherein the enteric compound comprises at least one material selected from the group consisting of acids and esters of methacrylic copolymers.

26. A system for delivery of an active substance for release in the intestinal tract according to any one of claims 22 through 25 wherein the active substance is selected from the group consisting of analgesics, antibiotics, antidepressants, antivirals, antibodies, immuno-modulators, oncolytics, immunogens, hormones, vaccines, enzymes, nutrients and dietary fiber.

27. A system for delivery of an active substance for release in the intestinal tract according to any one of claims 22 through 25 wherein the active substance is a .beta.-lactam antibiotic.

28. A system for delivery of an active substance for release in the intestinal tract comprising a liquid medium having a plurality of particles disposed therein, said particles comprising a core containing an active substance, said core being encapsulated by at least two layers of coating materials, one of said layers comprising a coating material, consisting essentially of zein and least one material selected from the group consisting of plasticizers and hydrophobic substances and the other layer comprising a coating material consisting essentially of an enteric compound and at least one material selected from the group consisting of plasticizers and anti-tackiness agents, such that said other layer is generally resistant to disintegration in human gastric juices but will disintegrate in human intestinal fluids, said particles having sizes of not greater than about 700 microns.

29. A system for delivery of an active substance for release in the intestinal

tract according to claim 28 wherein said particles have a structure such that the core is encapsulated by a first layer comprising a coating material, consisting essentially of zein and at least one material selected from the group consisting of plasticizers and hydrophobic substances and said first layer is encapsulated by an exterior layer comprising a coating material consisting essentially of an enteric compound and at least one material selected from the group consisting of plasticizers and anti-tackiness agents, such that said second layer is generally resistant to disintegration in human gastric juices but will disintegrate in human intestinal fluids.

30. A system for delivery of an active substance for release in the intestinal tract according to claim 28 wherein said particles have a structure such that the core is encapsulated by a first layer comprising a coating material, consisting essentially of an enteric compound and at least one material selected from the group consisting of plasticizers and anti-tackiness agents, such that said first layer is generally resistant to disintegration in human gastric juices but will disintegrate in human intestinal fluids, and said first layer is encapsulated by an exterior layer comprising a coating material consisting essentially of zein and at least one material selected from the group consisting of plasticizers and hydrophobic substances.

31. A system for delivery of an active substance for release in the intestinal tract according to claim 28 wherein said particles have a structure such that the core is encapsulated by a first layer comprising a coating material, consisting essentially of zein and at least one material selected from the group consisting of plasticizers and hydrophobic substances and said first layer is encapsulated by a second layer comprising a coating material, consisting essentially of an enteric compound and at least one material selected from the group consisting of plasticizers and anti-tackiness agents, such that said second layer is generally resistant to disintegration in human gastric juices but will disintegrate in human intestinal fluids, and said second layer is encapsulated by an exterior layer comprising a coating material consisting essentially of zein and at least one material selected from the group consisting of plasticizers and hydrophobic substances.

32. A system for delivery of an active substance for release in the intestinal tract according to claim 28 wherein the zein has an ash content of not greater than about 2% by weight, and the enteric compound comprises at least one material selected from the group consisting of acids and esters of methacrylic copolymers.

33. A system for delivery of an active substance for release in the intestinal tract according to claim 29 wherein the zein has an ash content of not greater than about 2% by weight, and the enteric compound comprises at least one material selected from the group consisting of acids and esters of methacrylic copolymers.

34. A system for delivery of an active substance for release in the intestinal tract according to claim 30 wherein the zein has an ash content of not greater than about 2% by weight and the enteric compound comprises at least one material selected from the group consisting of acids and esters of methacrylic copolymers.

35. A system for delivery of an active substance for release in the intestinal tract according to claim 31 wherein the zein has an ash content of not greater than about 2% by weight, and the enteric compound comprises at least one material selected from the group consisting of acids and esters of methacrylic copolymers.

36. A system for delivery of an active substance for release in the intestinal tract according to any one of claims 28 through 35 wherein the liquid medium is an aqueous medium.

37. A system for delivery of an active substance for release in the intestinal tract according to any one of claims 28 through 35 wherein the active substance is selected from the group consisting of analgesics, antibiotics, antidepressants, antivirals, antibodies, immuno-modulators, oncolytics, immunogens, hormones, vaccines, enzymes, nutrients and dietary fiber.

38. A system for delivery of an active substance for release in the intestinal tract according to either of claims 28 or 35 wherein the active substance is a .beta.-lactam antibiotic.

39. A system for delivery of an active substance for release in the intestinal tract according to claim 36 wherein the active substance is an antibiotic.

40. A system for delivery of an active substance for release in the intestinal tract according to claim 36 wherein the active substance is a .beta.-lactam antibiotic.

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L3: Entry 74 of 81

File: USPT

Jan 3, 1978

DOCUMENT-IDENTIFIER: US 4066754 A

TITLE: Slow release bolus

Brief Summary Text (25):

A controlled release, timed release or disintegration agent can be defined as a substance or mixture of substances added to a composition to facilitate its breakup or disintegration after administration into an animal. The use of zein in this invention provides for a controlled breakdown and distribution of bolus particles by the rumen fluid and bacteria found in the ruminant. Minute but critical levels of a conventional disintegrant, such as microcrystalline cellulose, can be added to further refine and regulate the rate of bolus disintegration in the rumen-reticular sac. The effective amounts of powdery zein and microcrystalline cellulose when mixed with all the ingredients of the bolus mixture prior to compression, facilitates timed disintegration of the bolus into granules that continuously flow into successive portions of the digestive tract and are eventually disintegrated to release the therapeutically active ingredient for a continuous absorption of the ingredient for a period of up to 15 days in duration. Disintegrating agents known in the prior art such as corn and potato starch and fibrous material, such as Avicel brand of microcrystalline cellulose, manufactured by the FMC Company, have great affinity for water and swell when moistened and thus facilitate a rapid rupture of the bolus matrix. Therefore, the use of these conventional disintegrating agents alone has not proven to be satisfactory for a sustained release bolus preparation. The water insoluble and water resistant controlled release agent of the instant invention, grainy powdery zein, should be present in effective amounts to provide the desired sustained release properties to the therapeutically active ingredient, but preferably in amounts of about 1.5 to about 10% of the total solids weight and most preferably, about 2 to about 4%. The grainy powdery texture of the zein is noted to physically distinguish it from the zein which is used as a binder when dissolved in an organic solvent. Therefore, when zein is referred to as a binder, it is in solution with the desired organic solvent and when zein is referred to as a disintegrating agent it is in a grainy, powdery form. Indeed, all particles of powdery zein should preferably pass through a 20 mesh screen. Further, a conventional disintegrating agent, preferably microcrystalline cellulose, may be present in amounts ranging from about 0.5 to 1.5% by weight of the bolus in addition to the powdery zein. The desired period of drug release can be adjusted to about 4 to 15 days in duration by regulating the proportion of critical ingredients and powdered zein, and if present in the formulation, the conventional disintegrating agent.

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L5: Entry 9 of 37

File: USPT

Aug 14, 2001

DOCUMENT-IDENTIFIER: US 6274168 B1

TITLE: Phenytoin sodium pharmaceutical compositions

Detailed Description Text (6):

Erodible matrix components include binders, diluents, and, optionally, alkaline pH modifier(s) and commonly used pharmaceutical excipients. "Binders" are compounds which cause agglomeration of drug and excipient particles during the manufacturing process and act to control the release of drug from the dosage form. The agglomeration can be in the form of a granulation or a powder. Binders can include acacia, alginic acid, carbomer, carboxymethylcellulose sodium, ethylcellulose, guar gum, hydroxypropyl cellulose, hydroxypropylmethyl cellulose, hydroxyethyl cellulose, liquid glucose, magnesium aluminum silicate, maltodextrin, methylcellulose, povidone, pregelatinized starch, sodium alginate, starch, dextrin, gelatin, hydrogenated vegetable oils, polymethacrylates, and zein. Preferred binders are povidone, hydroxyethyl cellulose, hydroxypropyl cellulose, and hydroxypropylmethyl cellulose. The most preferred binders are povidone and hydroxyethyl cellulose used in combination.

Current US Original Classification (1):424/451Current US Cross Reference Classification (1):424/464Current US Cross Reference Classification (2):424/484Current US Cross Reference Classification (3):424/485Current US Cross Reference Classification (4):424/486Current US Cross Reference Classification (5):424/487Current US Cross Reference Classification (6):424/488Current US Cross Reference Classification (7):424/489[Previous Doc](#)[Next Doc](#)[Go to Doc#](#)

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☐ 31. Document ID: US 5139787 A

Using default format because multiple data bases are involved.

L5: Entry 31 of 37

File: USPT

Aug 18, 1992

US-PAT-NO: 5139787

DOCUMENT-IDENTIFIER: US 5139787 A

TITLE: Gum composition containing dispersed porous beads containing active chewing gum ingredients and method

DATE-ISSUED: August 18, 1992

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Broderick; Kevin B.	Berwyn	IL		
Record; David W.	River Forest	IL		

US-CL-CURRENT: 424/486; 424/440, 426/3, 426/5

Full	Title	Citation	Front	Review	Classification	Date	Reference	Abstract	Claims	Drawings	Comments	Drawings
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☐ 32. Document ID: US 4753804 A

L5: Entry 32 of 37

File: USPT

Jun 28, 1988

US-PAT-NO: 4753804

DOCUMENT-IDENTIFIER: US 4753804 A

**** See image for Certificate of Correction ****

TITLE: Granular dietetic product based on amino acids and process for their preparation

DATE-ISSUED: June 28, 1988

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Iaccheri; Ennio	Burago Molgora			IT
Crimella; Tiziano	Milan			IT
Ponti; Giuseppe	Milan			IT

US-CL-CURRENT: 424/491; 424/489, 424/490, 424/493, 424/494, 424/496, 424/499,

514/561

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KWIC	Draw D
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☐ 33. Document ID: US 4681756 A

L5: Entry 33 of 37

File: USPT

Jul 21, 1987

US-PAT-NO: 4681756

DOCUMENT-IDENTIFIER: US 4681756 A

TITLE: Prevention of N-nitroso compound formation in vivo

DATE-ISSUED: July 21, 1987

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Mergens; William J.	West Caldwell	NJ		
Newmark; Harold L.	Maplewood	NJ		
Sheth; Prabhakar R.	Pearl River	NJ		
Tossounian; Jacques L.	Pine Brook	NJ		

US-CL-CURRENT: 424/451; 424/464, 514/458, 514/474

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KWIC	Draw D
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☐ 34. Document ID: US 4308251 A

L5: Entry 34 of 37

File: USPT

Dec 29, 1981

US-PAT-NO: 4308251

DOCUMENT-IDENTIFIER: US 4308251 A

**** See image for Certificate of Correction ****

TITLE: Controlled release formulations of orally-active medicaments

DATE-ISSUED: December 29, 1981

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Dunn; James M.	Shreveport	LA		
Lampard; John F.	Shreveport	LA		

US-CL-CURRENT: 424/469; 424/480

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KWIC	Draw D
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☐ 35. Document ID: US 4167558 A

L5: Entry 35 of 37

File: USPT

Sep 11, 1979

US-PAT-NO: 4167558

DOCUMENT-IDENTIFIER: US 4167558 A

TITLE: Novel sustained release tablet formulations

DATE-ISSUED: September 11, 1979

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Sheth; Prabhakar R.	Pearl River	NY		
Tossounian; Jacques L.	Pine Brook	NJ		

US-CL-CURRENT: 424/465; 514/164

Full	Title	Citation	Front	Review	Classification	Date	Reference	SEQUENCES	Attachments	Claims	KMC	Draw D
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☐ 36. Document ID: US 4140755 A

L5: Entry 36 of 37

File: USPT

Feb 20, 1979

US-PAT-NO: 4140755

DOCUMENT-IDENTIFIER: US 4140755 A

TITLE: Sustained release tablet formulations

DATE-ISSUED: February 20, 1979

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Sheth; Prabhakar R.	Pearl River	NY		
Tossounian; Jacques L.	Pine Brook	NJ		

US-CL-CURRENT: 424/472

Full	Title	Citation	Front	Review	Classification	Date	Reference	SEQUENCES	Attachments	Claims	KMC	Draw D
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☐ 37. Document ID: US 4126672 A

L5: Entry 37 of 37

File: USPT

Nov 21, 1978

US-PAT-NO: 4126672

DOCUMENT-IDENTIFIER: US 4126672 A

TITLE: Sustained release pharmaceutical capsules

DATE-ISSUED: November 21, 1978

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Sheth; Prabhakar R.	Pearl River	NY		
Tossounian; Jacques L.	Pine Brook	NJ		

US-CL-CURRENT: 424/452

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KMC	Draw D
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☐ 1. Document ID: US 6726930 B1

Using default format because multiple data bases are involved.

L5: Entry 1 of 37

File: USPT

Apr 27, 2004

US-PAT-NO: 6726930

DOCUMENT-IDENTIFIER: US 6726930 B1

TITLE: Sustained release heterodisperse hydrogel systems for insoluble drugs

DATE-ISSUED: April 27, 2004

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Baichwal; Anand R.	Wappingers Falls	NY		

US-CL-CURRENT: 424/468; 424/464, 424/465, 424/474, 424/475, 424/488, 514/780

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KWIC	Draw D
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☐ 2. Document ID: US 6709677 B2

L5: Entry 2 of 37

File: USPT

Mar 23, 2004

US-PAT-NO: 6709677

DOCUMENT-IDENTIFIER: US 6709677 B2

TITLE: Sustained release heterodisperse hydrogel systems-amorphous drugs

DATE-ISSUED: March 23, 2004

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Baichwal; Anand	Wappingers Falls	NY		

US-CL-CURRENT: 424/489; 424/464, 424/468, 424/474, 424/481, 424/490, 424/496

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KWIC	Draw D
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☐ 3. Document ID: US 6689386 B2

L5: Entry 3 of 37

File: USPT

Feb 10, 2004

US-PAT-NO: 6689386

DOCUMENT-IDENTIFIER: US 6689386 B2

TITLE: Sustained release matrix for high-dose insoluble drugs

DATE-ISSUED: February 10, 2004

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Baichwal; Anand R.	Wappingers Falls	NY		

US-CL-CURRENT: [424/469](#); [424/440](#), [424/464](#), [424/465](#), [424/468](#), [424/470](#), [424/488](#)

Full	Title	Citation	Front	Review	Classification	Date	Reference	Substance	Attachment	Claims	KWIC	Draw. De
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☐ 4. Document ID: US 6620432 B2

L5: Entry 4 of 37

File: USPT

Sep 16, 2003

US-PAT-NO: 6620432

DOCUMENT-IDENTIFIER: US 6620432 B2

TITLE: Phenytoin sodium pharmaceutical compositions

DATE-ISSUED: September 16, 2003

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Addicks; William J.	Morgantown	WV		
Duda; Joseph P.	Morgantown	WV		
Snider; Daniel A.	Morgantown	WV		
Benson; Kerry R.	Morgantown	WV		

US-CL-CURRENT: [424/451](#); [424/464](#), [424/469](#), [424/484](#), [424/485](#), [424/486](#), [424/487](#),
[424/488](#), [514/770](#), [514/772.3](#), [514/773](#), [514/774](#), [514/777](#), [514/778](#), [514/779](#), [514/781](#),
[514/782](#), [514/783](#)

Full	Title	Citation	Front	Review	Classification	Date	Reference	Substance	Attachment	Claims	KWIC	Draw. De
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☐ 5. Document ID: US 6537578 B1

L5: Entry 5 of 37

File: USPT

Mar 25, 2003

US-PAT-NO: 6537578

DOCUMENT-IDENTIFIER: US 6537578 B1

TITLE: Once-a-day controlled release sulfonylurea formulation

DATE-ISSUED: March 25, 2003

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Bhagwat; Dileep	Bronxville	NY		
Baichwal; Anand R.	Wappinger Falls	NY		
Diehl, II; Donald	Stony Point	NY		

US-CL-CURRENT: [424/488](#); [424/458](#), [424/468](#), [424/485](#), [424/494](#), [424/500](#)

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KMNC	Draw De
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☐ 6. Document ID: US 6372252 B1

L5: Entry 6 of 37

File: USPT

Apr 16, 2002

US-PAT-NO: 6372252

DOCUMENT-IDENTIFIER: US 6372252 B1

**** See image for Certificate of Correction ****

TITLE: Guaifenesin sustained release formulation and tablets

DATE-ISSUED: April 16, 2002

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Blume; Ralph W.	Fort Worth	TX		
Davis; Robert D.	Arlington	TX		
Keyser; Donald Jeffrey	Southlake	TX		

US-CL-CURRENT: [424/464](#); [424/400](#), [424/468](#), [424/472](#), [424/474](#), [424/475](#)

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KMNC	Draw De
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☐ 7. Document ID: US 6365148 B1

L5: Entry 7 of 37

File: USPT

Apr 2, 2002

US-PAT-NO: 6365148

DOCUMENT-IDENTIFIER: US 6365148 B1

TITLE: Enteric coated microgranules for stabilizing lactic acid bacteria

DATE-ISSUED: April 2, 2002

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Kim; Dong Yeun	Seoul			KR
Park; Dong Woo	Seoul			KR
Jeon; Hong Ryeol	Suwon-shi			KR

US-CL-CURRENT: 424/93.1; 424/490, 435/252.9

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KMCC	Draw D
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☐ 8. Document ID: US 6335388 B1

L5: Entry 8 of 37

File: USPT

Jan 1, 2002

US-PAT-NO: 6335388

DOCUMENT-IDENTIFIER: US 6335388 B1

TITLE: Prolamine-plant polar lipid composition, its method of preparation and applications thereof

DATE-ISSUED: January 1, 2002

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Fotinos; Spiros	Athens			GR

US-CL-CURRENT: 524/20; 424/443, 424/450, 424/78.02, 424/78.06, 514/2, 514/21,
523/105, 524/17

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KMCC	Draw D
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☐ 9. Document ID: US 6274168 B1

L5: Entry 9 of 37

File: USPT

Aug 14, 2001

US-PAT-NO: 6274168

DOCUMENT-IDENTIFIER: US 6274168 B1

TITLE: Phenytoin sodium pharmaceutical compositions

DATE-ISSUED: August 14, 2001

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Addicks; William J	Morgantown	WV		
Duda; Joseph P	Morgantown	WV		
Snider; Daniel A.	Morgantown	WV		
Benson; Kerry R	Morgantown	WV		

US-CL-CURRENT: 424/451; 424/464, 424/484, 424/485, 424/486, 424/487, 424/488,
424/489, 514/770, 514/772.3, 514/773, 514/774, 514/777, 514/778, 514/779, 514/781,
514/782, 514/783

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KMCC	Draw D
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☐ 10. Document ID: US 6245356 B1

L5: Entry 10 of 37

File: USPT

Jun 12, 2001

US-PAT-NO: 6245356

DOCUMENT-IDENTIFIER: US 6245356 B1

TITLE: Sustained release heterodisperse hydrogel systems-amorphous drugs

DATE-ISSUED: June 12, 2001

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Baichwal; Anand	Wappingers Falls	NY		

US-CL-CURRENT: 424/468; 424/480, 424/481, 424/482

Full	Title	Citation	Front	Review	Classification	Date	Reference	References	Attachments	Claims	KWC	Draw. De
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☐ 11. Document ID: US 6245355 B1

L5: Entry 11 of 37

File: USPT

Jun 12, 2001

US-PAT-NO: 6245355

DOCUMENT-IDENTIFIER: US 6245355 B1

TITLE: Sustained release matrix for high-dose insoluble drugs

DATE-ISSUED: June 12, 2001

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Baichwal; Anand R.	Wappingers Falls	NY		

US-CL-CURRENT: 424/468; 424/464

Full	Title	Citation	Front	Review	Classification	Date	Reference	References	Attachments	Claims	KWC	Draw. De
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☐ 12. Document ID: US 6136343 A

L5: Entry 12 of 37

File: USPT

Oct 24, 2000

US-PAT-NO: 6136343

DOCUMENT-IDENTIFIER: US 6136343 A

TITLE: Sustained release heterodisperse hydrogel systems for insoluble drugs

DATE-ISSUED: October 24, 2000

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
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Baichwal; Anand R. Wappinger Falls NY

US-CL-CURRENT: 424/468; 424/488, 514/777, 514/778, 514/779, 514/780, 514/781,
514/964, 514/965

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KWIC	Draw. De
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☐ 13. Document ID: US 6093420 A

L5: Entry 13 of 37

File: USPT

Jul 25, 2000

US-PAT-NO: 6093420

DOCUMENT-IDENTIFIER: US 6093420 A

TITLE: Sustained release matrix for high-dose insoluble drugs

DATE-ISSUED: July 25, 2000

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Baichwal; Anand R.	Wappingers Falls	NY		

US-CL-CURRENT: 424/468; 424/464, 424/469, 424/481, 424/485, 514/960

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KWIC	Draw. De
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☐ 14. Document ID: US 6056977 A

L5: Entry 14 of 37

File: USPT

May 2, 2000

US-PAT-NO: 6056977

DOCUMENT-IDENTIFIER: US 6056977 A

TITLE: Once-a-day controlled release sulfonylurea formulation

DATE-ISSUED: May 2, 2000

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Bhagwat; Dileep	Bronxville	NY		
Diehl, II; Donald	Stony Point	NY		
Baichwal; Anand R.	Wappinger Falls	NY		

US-CL-CURRENT: 424/488; 424/458, 424/468, 424/485, 424/499, 424/500

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KWIC	Draw. De
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☐ 15. Document ID: US 6048548 A

L5: Entry 15 of 37

File: USPT

Apr 11, 2000

US-PAT-NO: 6048548

DOCUMENT-IDENTIFIER: US 6048548 A

TITLE: Sustained release heterodisperse hydrogel systems-amorphous drugs

DATE-ISSUED: April 11, 2000

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Baichwal; Anand	Wappingers Falls	NY		

US-CL-CURRENT: 424/468; 424/480, 424/481, 424/482

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequence	Attachment	Claims	KMC	Draw. De
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☐ 16. Document ID: US 6039980 A

L5: Entry 16 of 37

File: USPT

Mar 21, 2000

US-PAT-NO: 6039980

DOCUMENT-IDENTIFIER: US 6039980 A

TITLE: Sustained release excipient

DATE-ISSUED: March 21, 2000

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Baichwal; Anand R.	Wappinger Falls	NY		

US-CL-CURRENT: 424/500; 424/465, 424/468

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequence	Attachment	Claims	KMC	Draw. De
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☐ 17. Document ID: US 5958456 A

L5: Entry 17 of 37

File: USPT

Sep 28, 1999

US-PAT-NO: 5958456

DOCUMENT-IDENTIFIER: US 5958456 A

TITLE: Controlled release formulation (albuterol)

DATE-ISSUED: September 28, 1999

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Baichwal; Anand	Wappingers Falls	NY		

McCall; Troy W. New Milford CT

US-CL-CURRENT: 424/489; 424/457, 424/468, 424/488

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KWIC	Drawings
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☐ 18. Document ID: US 5846563 A

L5: Entry 18 of 37

File: USPT

Dec 8, 1998

US-PAT-NO: 5846563

DOCUMENT-IDENTIFIER: US 5846563 A

TITLE: Sustained release heterodisperse hydrogel systems for insoluble drugs

DATE-ISSUED: December 8, 1998

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Baichwal; Anand R.	Wappingers Falls	NY		

US-CL-CURRENT: 424/457; 424/468, 424/488, 514/777, 514/778, 514/779, 514/780,
514/781, 514/964, 514/965

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KWIC	Drawings
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☐ 19. Document ID: US 5773025 A

L5: Entry 19 of 37

File: USPT

Jun 30, 1998

US-PAT-NO: 5773025

DOCUMENT-IDENTIFIER: US 5773025 A

TITLE: Sustained release heterodisperse hydrogel systems--amorphous drugs

DATE-ISSUED: June 30, 1998

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Baichwal; Anand	Wappingers Falls	NY		

US-CL-CURRENT: 424/458; 424/452, 424/459, 424/468, 424/476, 424/500, 514/782

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KWIC	Drawings
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☐ 20. Document ID: US 5667801 A

L5: Entry 20 of 37

File: USPT

Sep 16, 1997

US-PAT-NO: 5667801

DOCUMENT-IDENTIFIER: US 5667801 A

TITLE: Sustained release heterodisperse hydrogel systems for insoluble drugs

DATE-ISSUED: September 16, 1997

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Baichwal; Anand R.	Wappingers Falls	NY		

US-CL-CURRENT: 424/457; 424/468, 424/488, 514/777, 514/778, 514/779, 514/780, 514/781, 514/964, 514/965

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KWIC	Drawings
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☐ 21. Document ID: US 5662933 A

L5: Entry 21 of 37

File: USPT

Sep 2, 1997

US-PAT-NO: 5662933

DOCUMENT-IDENTIFIER: US 5662933 A

TITLE: Controlled release formulation (albuterol)

DATE-ISSUED: September 2, 1997

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Baichwal; Anand	Wappingers Falls	NY		
McCall; Troy W.	New Milford	CT		

US-CL-CURRENT: 424/457; 424/468, 424/488, 514/777, 514/778, 514/779, 514/780, 514/781, 514/964, 514/965

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KWIC	Drawings
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☐ 22. Document ID: US 5554387 A

L5: Entry 22 of 37

File: USPT

Sep 10, 1996

US-PAT-NO: 5554387

DOCUMENT-IDENTIFIER: US 5554387 A

TITLE: Sustained release heterodisperse hydrogel systems for insoluble drugs

DATE-ISSUED: September 10, 1996

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
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Baichwal; Anand R. Wappingers Falls NY

US-CL-CURRENT: 424/488; 514/964, 524/55

Full	Title	Citation	Front	Review	Classification	Date	Reference	Abstracts	Attachments	Claims	KWMC	Draw. Data
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☐ 23. Document ID: US 5545414 A

L5: Entry 23 of 37

File: USPT

Aug 13, 1996

US-PAT-NO: 5545414

DOCUMENT-IDENTIFIER: US 5545414 A

TITLE: Cholesterol lowering food product

DATE-ISSUED: August 13, 1996

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Behr; Stephen R.	Westerville	OH		
Seeds; Jeffrey K.	Pickerington	OH		
Lamb; Catherine S.	Westerville	OH		
Garleb; Keith A.	Powell	OH		
Walton; Joseph E.	Westerville	OH		

US-CL-CURRENT: 424/484; 424/485, 424/488, 424/490, 424/491, 424/493, 424/499,
514/824

Full	Title	Citation	Front	Review	Classification	Date	Reference	Abstracts	Attachments	Claims	KWMC	Draw. Data
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☐ 24. Document ID: US 5512297 A

L5: Entry 24 of 37

File: USPT

Apr 30, 1996

US-PAT-NO: 5512297

DOCUMENT-IDENTIFIER: US 5512297 A

TITLE: Sustained release heterodisperse hydrogel systems for insoluble drugs

DATE-ISSUED: April 30, 1996

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Baichwal; Anand R.	Wappingers Falls	NY		

US-CL-CURRENT: 424/451

Full	Title	Citation	Front	Review	Classification	Date	Reference	Abstracts	Attachments	Claims	KWMC	Draw. Data
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☐ 25. Document ID: US 5455046 A

L5: Entry 25 of 37

File: USPT

Oct 3, 1995

US-PAT-NO: 5455046

DOCUMENT-IDENTIFIER: US 5455046 A

**** See image for Certificate of Correction ****

TITLE: Sustained release heterodisperse hydrogel systems for insoluble drugs

DATE-ISSUED: October 3, 1995

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Baichwal; Anand R.	Wappingers Falls	NY		

US-CL-CURRENT: 424/457; 424/468, 424/488, 514/777, 514/778, 514/779, 514/780,
514/781, 514/964, 514/965

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequence	Abstracts	Claims	KMIC	Draw Ds
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☐ 26. Document ID: US 5399362 A

L5: Entry 26 of 37

File: USPT

Mar 21, 1995

US-PAT-NO: 5399362

DOCUMENT-IDENTIFIER: US 5399362 A

TITLE: Once-a-day metoprolol oral dosage form

DATE-ISSUED: March 21, 1995

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Baichwal; Anand	Wappingers Falls	NY		
McCall; Troy W.	New Milford	CT		

US-CL-CURRENT: 424/488; 424/464, 424/468, 424/469, 424/484, 424/485

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequence	Abstracts	Claims	KMIC	Draw Ds
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☐ 27. Document ID: US 5399359 A

L5: Entry 27 of 37

File: USPT

Mar 21, 1995

US-PAT-NO: 5399359

DOCUMENT-IDENTIFIER: US 5399359 A

TITLE: Controlled release oxybutynin formulations

DATE-ISSUED: March 21, 1995

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Baichwal; Anand R.	Wappingers Falls	NY		

US-CL-CURRENT: 424/464; 424/468, 424/469, 424/484, 424/485, 424/488

Full	Title	Citation	Front	Review	Classification	Date	Reference	Synopsis	Attachment	Claims	KMC	Draw D
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☐ 28. Document ID: US 5399358 A

L5: Entry 28 of 37

File: USPT

Mar 21, 1995

US-PAT-NO: 5399358

DOCUMENT-IDENTIFIER: US 5399358 A

TITLE: Sustained release formulations for 24 hour release of metoprolol

DATE-ISSUED: March 21, 1995

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Baichwal; Anand R.	Wappingers Falls	NY		
Staniforth; John N.	Bath			GB2

US-CL-CURRENT: 424/464; 424/468, 424/469, 424/484, 424/485, 424/488

Full	Title	Citation	Front	Review	Classification	Date	Reference	Synopsis	Attachment	Claims	KMC	Draw D
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☐ 29. Document ID: US 5160742 A

L5: Entry 29 of 37

File: USPT

Nov 3, 1992

US-PAT-NO: 5160742

DOCUMENT-IDENTIFIER: US 5160742 A

**** See image for Certificate of Correction ****

TITLE: System for delivering an active substance for sustained release

DATE-ISSUED: November 3, 1992

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Mazer; Terrence B.	Reynoldsburg	OH		
Meyer; Glenn A.	Wankegan	IL		
Hwang; Shie-Ming	Arlington	OH		
Candler, Jr.; Edrick L.	Dublin	OH		
Drayer; Lonnie R.	Gahanna	OH		
Daab-Krzykowski; Andre	Columbus	OH		

US-CL-CURRENT: 424/469; 424/470, 424/491, 424/497

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequence	Attachments	Claims	KMIC	Draw Data
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☐ 30. Document ID: US 5154927 A

L5: Entry 30 of 37

File: USPT

Oct 13, 1992

US-PAT-NO: 5154927

DOCUMENT-IDENTIFIER: US 5154927 A

**** See image for Certificate of Correction ****

TITLE: Gum composition containing dispersed porous beads containing active chewing gum ingredients and method

DATE-ISSUED: October 13, 1992

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Song; Joo H.	Northbrook	IL		
Greenberg; Michael J.	Northbrook	IL		
Record; David W.	River Forest	IL		
Zibell; Steven E.	Blue Island	IL		
Broderick; Kevin	Berwyn	IL		
Schnell; Philip G.	Downers Grove	IL		

US-CL-CURRENT: 424/440; 424/48, 424/485, 424/488, 426/5

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequence	Attachments	Claims	KMIC	Draw Data
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Terms	Documents
L4 and 424/\$.ccls.	37

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DATE: Friday, November 12, 2004

Hide? Set Name Query**Hit Count***DB=USPT,EPAB,JPAB,DWPI,TDBD; PLUR=YES; OP=OR*

<input type="checkbox"/>	L5	L4 and 424/\$.ccls.	37
<input type="checkbox"/>	L4	(zein or prolamine) same (control\$ or sustain\$) same (gum)	75
<input type="checkbox"/>	L3	(zein or prolamine) same (control\$ or sustain\$) same (starch or gelatin)	81
<input type="checkbox"/>	L2	(zein or prolamine) same (control\$ or sustain\$) same (hydrocolloid)	5
<input type="checkbox"/>	L1	(zein or prolamine) same (control\$ or sustain\$)	455

END OF SEARCH HISTORY

Hit List

Clear	Generate Collection	Print	Fwd Refs	Bkwd Refs
Generate OACS				

Search Results - Record(s) 1 through 13 of 13 returned.

☐ 1. Document ID: US 6649187 B2

Using default format because multiple data bases are involved.

L1: Entry 1 of 13

File: USPT

Nov 18, 2003

US-PAT-NO: 6649187

DOCUMENT-IDENTIFIER: US 6649187 B2

TITLE: Use of polyalkylamine polymers in controlled release devices

DATE-ISSUED: November 18, 2003

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Hussain; Munir A.	Wilmington	DE		
Repta; Arnold J.	Greenville	DE		

US-CL-CURRENT: [424/474](#); [424/464](#), [424/473](#), [424/479](#), [424/480](#), [424/489](#), [424/78.08](#)

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KWIC	Draw D
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☐ 2. Document ID: US 6264981 B1

L1: Entry 2 of 13

File: USPT

Jul 24, 2001

US-PAT-NO: 6264981

DOCUMENT-IDENTIFIER: US 6264981 B1

TITLE: Oral transmucosal drug dosage using solid solution

DATE-ISSUED: July 24, 2001

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Zhang; Hao	Salt Lake City	UT		
Croft; Jed	Salt Lake City	UT		

US-CL-CURRENT: [424/451](#); [424/464](#)

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KWIC	Draw D
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☐ 3. Document ID: US 5874522 A

L1: Entry 3 of 13

File: USPT

Feb 23, 1999

US-PAT-NO: 5874522

DOCUMENT-IDENTIFIER: US 5874522 A

TITLE: Crosslinked polymeric ammonium salts

DATE-ISSUED: February 23, 1999

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Figuly; Garret Daniel	Wilmington	DE		
Matos; Jose Ricardo	New Castle	DE		

US-CL-CURRENT: 528/422; 424/78.12, 424/78.14, 514/909, 528/288, 528/332, 528/343,
528/395, 528/486

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequence	Attachments	Claims	KMNC	Draw D
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☐ 4. Document ID: US 5726284 A

L1: Entry 4 of 13

File: USPT

Mar 10, 1998

US-PAT-NO: 5726284

DOCUMENT-IDENTIFIER: US 5726284 A

TITLE: Crosslinked polymric ammonium salts

DATE-ISSUED: March 10, 1998

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Figuly; Garret Daniel	Wilmington	DE		
Matos; Jose Ricardo	New Castle	DE		

US-CL-CURRENT: 528/397; 424/78.12, 424/78.14, 514/909

Full	Title	Citation	Front	Review	Classification	Date	Reference	Certificates	Attachments	Claims	KMNC	Draw D
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☐ 5. Document ID: US 5556619 A

L1: Entry 5 of 13

File: USPT

Sep 17, 1996

US-PAT-NO: 5556619

DOCUMENT-IDENTIFIER: US 5556619 A

**** See image for Certificate of Correction ****

TITLE: Crosslinked polymeric ammonium salts

DATE-ISSUED: September 17, 1996

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Royce; Susan D.	Wilmington	DE		
Figuly; Garret D.	Wilmington	DE		
Khasat; Nitya P.	Newark	DE		
Matos; Jose R.	New Castle	DE		

US-CL-CURRENT: 424/78.08; 424/78.01, 528/422

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KWIC	Draw. De
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☐ 6. Document ID: US 5545414 A

L1: Entry 6 of 13

File: USPT

Aug 13, 1996

US-PAT-NO: 5545414

DOCUMENT-IDENTIFIER: US 5545414 A

TITLE: Cholesterol lowering food product

DATE-ISSUED: August 13, 1996

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Behr; Stephen R.	Westerville	OH		
Seeds; Jeffrey K.	Pickerington	OH		
Lamb; Catherine S.	Westerville	OH		
Garleb; Keith A.	Powell	OH		
Walton; Joseph E.	Westerville	OH		

US-CL-CURRENT: 424/484; 424/485, 424/488, 424/490, 424/491, 424/493, 424/499,
514/824

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KWIC	Draw. De
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☐ 7. Document ID: US 5520942 A

L1: Entry 7 of 13

File: USPT

May 28, 1996

US-PAT-NO: 5520942

DOCUMENT-IDENTIFIER: US 5520942 A

TITLE: Snack food coating using supercritical fluid spray

DATE-ISSUED: May 28, 1996

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
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Sauer, Jr.; Robert M.	West Milford	NJ
Menjivar; Juan A.	Denville	NJ
Burns; Bradford A.	Greyslake	IL

US-CL-CURRENT: [426/289](#); [426/302](#), [426/497](#), [426/549](#), [426/560](#)

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KWIC	Draw. De
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☐ 8. Document ID: US 4563360 A

L1: Entry 8 of 13

File: USPT

Jan 7, 1986

US-PAT-NO: 4563360

DOCUMENT-IDENTIFIER: US 4563360 A

TITLE: Edible xanthan gum-protein fibrous complexes

DATE-ISSUED: January 7, 1986

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Soucie; William G.	Gurnee	IL		
Chen; Wen-Sherng	Glenview	IL		

US-CL-CURRENT: [426/104](#); [426/574](#), [426/656](#), [426/657](#), [426/659](#), [426/802](#)

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KWIC	Draw. De
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☐ 9. Document ID: US 4375481 A

L1: Entry 9 of 13

File: USPT

Mar 1, 1983

US-PAT-NO: 4375481

DOCUMENT-IDENTIFIER: US 4375481 A

**** See image for Certificate of Correction ****

TITLE: Process for production of roe-like multilayer spherical structure

DATE-ISSUED: March 1, 1983

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Kuwabara; Kiyooki	Uozu			JP
Jyouraku; Masanori	Uozu			JP

US-CL-CURRENT: [426/93](#); [426/104](#), [426/573](#), [426/575](#), [426/576](#), [426/577](#), [426/658](#),
[426/802](#)

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KWIC	Draw. De
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☐ 10. Document ID: US 4198438 A

L1: Entry 10 of 13

File: USPT

Apr 15, 1980

US-PAT-NO: 4198438

DOCUMENT-IDENTIFIER: US 4198438 A

TITLE: Modified gluten product and process

DATE-ISSUED: April 15, 1980

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Singer; Norman S.	London			CA
Murray; David W.	London			CA

US-CL-CURRENT: 426/549; 426/23, 426/653, 426/656, 530/374

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Abstracts	Claims	KMIC	Draw. De
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☐ 11. Document ID: US 4180407 A

L1: Entry 11 of 13

File: USPT

Dec 25, 1979

US-PAT-NO: 4180407

DOCUMENT-IDENTIFIER: US 4180407 A

TITLE: Ink for application to unglazed paper surfaces

DATE-ISSUED: December 25, 1979

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Gibson; Donald M.	Oakland	CA	94610	
Pierce; Donald C.	Novato	CA	94947	

US-CL-CURRENT: 106/31.64; 106/31.69, 106/31.83, 106/403, 106/414, 523/122, 524/175, 524/247, 524/407, 524/431, 524/440, 524/443

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Abstracts	Claims	KMIC	Draw. De
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☐ 12. Document ID: US 20020173553 A1

L1: Entry 12 of 13

File: DWPI

Nov 21, 2002

DERWENT-ACC-NO: 2003-182939

DERWENT-WEEK: 200318

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TITLE: Zein coated xanthan composition as thickening and suspension agent useful in chemical, pharmaceutical, and food applications, e.g. dairy products, includes

xanthan gum particles coated with zein and emulsifier(s)

INVENTOR: CHEN, Y; GROSS, A ; TALASHEK, T ; YUAN, R

PRIORITY-DATA: 2001US-0855756 (May 16, 2001)

PATENT-FAMILY:

PUB-NO	PUB-DATE	LANGUAGE	PAGES	MAIN-IPC
US 20020173553 A1	November 21, 2002		007	C09K003/00

INT-CL (IPC): C09 K 3/00

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequence	Attachment	Claims	KWIC	Draw D
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☐ 13. Document ID: WO 9413160 A1, AU 9352940 A

L1: Entry 13 of 13

File: DWPI

Jun 23, 1994

DERWENT-ACC-NO: 1994-217417

DERWENT-WEEK: 199426

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TITLE: Crisping compsn. for fried food - contg. film-forming and hydrophobic compsns. used e.g. on meat, poultry or fish

INVENTOR: ANDERSON, J M; GILL, R P ; MACRI, C A ; RAGGON, J W ; TOTINO, R A ;
VINCENT, M J ; WATKINS, E K

PRIORITY-DATA: 1992US-0991634 (December 16, 1992)

PATENT-FAMILY:

PUB-NO	PUB-DATE	LANGUAGE	PAGES	MAIN-IPC
WO 9413160 A1	June 23, 1994	E	041	A23P001/08
AU 9352940 A	July 4, 1994		000	A23P001/08

INT-CL (IPC): A23P 1/08

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequence	Attachment	Claims	KWIC	Draw D
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Terms	Documents
(xanthan adj1 gum) adj5 (prolamine or zein or hordein or gliadin or kafirin or secalinin or aveline or panincin or orzenin)	13

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L2: Entry 16 of 17

File: DWPI

Jul 16, 1998

DERWENT-ACC-NO: 1998-398713

DERWENT-WEEK: 200115

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TITLE: Filter aid protein=polysaccharide composition e.g. for sorbing metal(s) - comprises water=soluble polysaccharide impregnated with water=insoluble protein giving low cost removal of impuritie(s)

Basic Abstract Text (10):

Preferably the polysaccharide is selected from alginate, carrageenin, gum arabic, tragacanth, pectin, ghatti, guar gum and/or xanthan gum, especially guar gum, with the protein selected from prolamine or zein, more especially zein. The composition also includes an additive promoting impregnation of the polysaccharide by the protein. The filter aid also comprises 0.25-5 wt% of an acidulant selected from tannic, lactic, ascorbic, acetic, citric, malic, adipic and/or fumaric acids and 0.125-5 wt% of a metal oxide filler. The composition forms a precoat layer on a filter element covering 2.5 multiply 10-4- 1 g/ft2 of the surface.

Equivalent Abstract Text (10):

Preferably the polysaccharide is selected from alginate, carrageenin, gum arabic, tragacanth, pectin, ghatti, guar gum and/or xanthan gum, especially guar gum, with the protein selected from prolamine or zein, more especially zein. The composition also includes an additive promoting impregnation of the polysaccharide by the protein. The filter aid also comprises 0.25-5 wt% of an acidulant selected from tannic, lactic, ascorbic, acetic, citric, malic, adipic and/or fumaric acids and 0.125-5 wt% of a metal oxide filler. The composition forms a precoat layer on a filter element covering 2.5 multiply 10-4- 1 g/ft2 of the surface.

Equivalent Abstract Text (22):

Preferably the polysaccharide is selected from alginate, carrageenin, gum arabic, tragacanth, pectin, ghatti, guar gum and/or xanthan gum, especially guar gum, with the protein selected from prolamine or zein, more especially zein. The composition also includes an additive promoting impregnation of the polysaccharide by the protein. The filter aid also comprises 0.25-5 wt% of an acidulant selected from tannic, lactic, ascorbic, acetic, citric, malic, adipic and/or fumaric acids and 0.125-5 wt% of a metal oxide filler. The composition forms a precoat layer on a filter element covering 2.5 multiply 10-4- 1 g/ft2 of the surface.

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WEST Search History

DATE: Friday, November 12, 2004

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		<i>DB=USPT,EPAB,JPAB,DWPI,TDBD; PLUR=YES; OP=OR</i>	
<input type="checkbox"/>	L2	(xanthan adj1 gum) adj10 (prolamine or zein or hordein or gliadin or kafirin or secalinin or aveline or panincin or orzenin)	17
<input type="checkbox"/>	L1	(xanthan adj1 gum) adj5 (prolamine or zein or hordein or gliadin or kafirin or secalinin or aveline or panincin or orzenin)	13

END OF SEARCH HISTORY